CVNP 2625: Defensive Security

A. COURSE DESCRIPTION

   Credits: 4
   Lecture Hours/Week: 3
   Lab Hours/Week: 2
   OJT Hours/Week: *.*

   Prerequisites:
   This course requires the following prerequisite
   CVNP 2615 - Security Fundamentals (Number of Years Valid: 5)

   Corequisites: None

   MnTC Goals: None

   This course is designed to present a more advanced exposure to computer security for all users, from business professionals to students, to home users. As computers and networks come under constant attacks today by hackers, computer security has become critical for all computer users. This course provides a hands-on approach to computer and network security through discussion and a wide variety of tools used in the cyber-security field.

B. COURSE EFFECTIVE DATES: 04/15/2020 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

   1. Role of people in security
   2. Cryptography
   3. Public Key Infrastructure (PKI)
   4. Infrastructure security
   5. Authentication and remote access
   6. Wireless security and mobile devices
   7. Intrusion Detection Systems (IDS) and network security
   8. Secure software development
   9. Types of attacks and malicious software
   10. Web components
   11. Risk management
   12. Incident response

D. LEARNING OUTCOMES (General)

   1. The learner will explore the technologies used and principles involved in creating a secure computer networking environment.
   2. The learner will understand authentication, the types of attacks and malicious code that may be used against a network, the threats and countermeasures for e-mail, Web applications, remote access, and file and print services.
   3. The learner will understand intrusion detection systems, firewalls, and physical security concepts and will understand the daily tasks involved with managing and troubleshooting those technologies.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

   None
F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted